(No Model.)

S. M. JONES.

POWER TRANSMITTING APPARATUS.

No. 590,313. Patented Sept. 21, 1897.

FIG. 1.

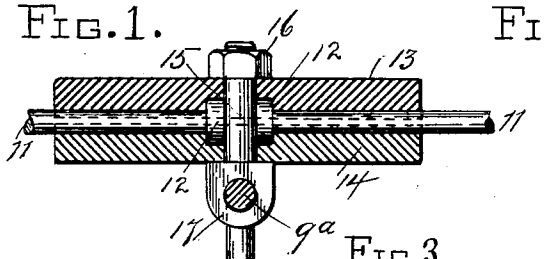


FIG. 2.

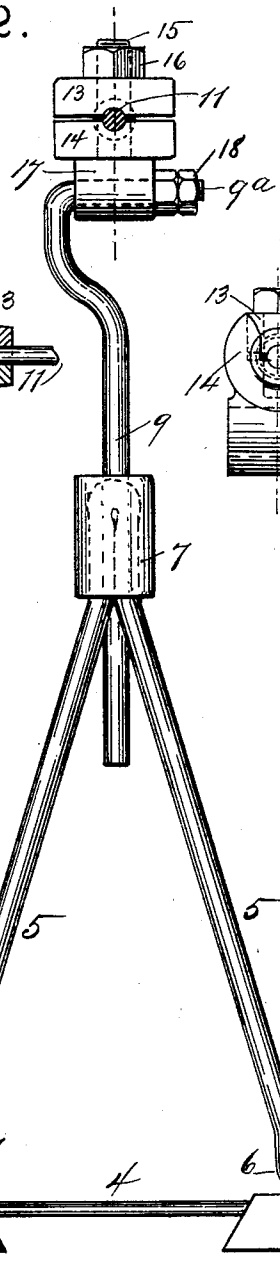


FIG. 3.

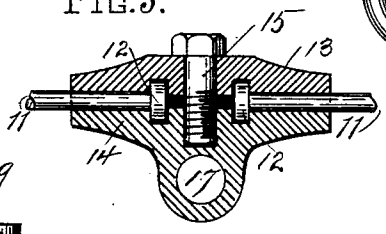
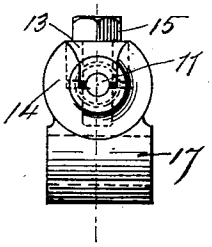


FIG. 4.



WITNESSES.

David C. Watter

L. E. Brown.

INVENTOR

Samuel M. Jones,

By Munn & Hall,

His Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL M. JONES, OF TOLEDO, OHIO.

POWER-TRANSMITTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 590,313, dated September 21, 1897.

Application filed October 28, 1896. Serial No. 610,268. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. JONES, a citizen of the United States, residing at Toledo, Lucas county, Ohio, have invented certain new and useful Improvements in Power-Transmitting Apparatus, of which the following is a specification.

My invention relates to an apparatus for the transmission and distribution of power from a central driving apparatus to distant points—such, for instance, as the pumps of scattered oil-wells—and more particularly to a series of horizontally-reciprocating rods and means for connecting and pivotally supporting the same.

The objects of my invention are, first, to provide a strong, simple, and cheap base for the pivotal support of the horizontal reciprocating rods, hereinafter referred to; second, to provide light, strong, simple supports for said rods, having means for vertically adjusting the same, and, third, to furnish a coupling for the meeting ends of said horizontal power-transmitting rods which shall serve the double purpose of a rod-coupling and a pivotal connection between said rods and their supports. I attain these objects by means of the devices and arrangement of parts hereinafter described, and shown and illustrated in the accompanying drawings, made part hereof, in which—

Figure 1 is a side elevation of my device, partly in section; Fig. 2, an end view of the same; Fig. 3, a central longitudinal section of a modification of the pivotal connecting-piece above referred to, and Fig. 4 an end elevation of the same.

Like numerals indicate like parts throughout the several views.

In the drawings, 1 is a base-plate composed of cast metal or stamped sheet metal, having downwardly-turned flanges 2 and having an upwardly-projecting lug 3, with a hole bored through it horizontally, forming an eye. This plate may be either single or formed in two parts, as shown in Fig. 2. When the plate is formed of two parts, I prefer to connect them by means of stout iron rods 4, suitably secured to and connecting the foundation-plates. This arrangement provides sufficient strength and rigidity and dispenses with much of the weight incident to the use of a single large plate.

5 is an iron rod bent double at its middle, and a short distance from the bend having the two branches separated at an angle in inverted-V shape. The extremities of the rod are bent outwardly and horizontally, as at 6. The doubled portion of the rod 5 is socketed and secured in a head 7, and each foot 6 of the rod is slipped into one of the eyes 3, which may be accomplished by springing the ends of the rod into place. In the head 7 is a vertical bore, as at 8, in which slides freely a rod 9, which may be held at any desired vertical adjustment by means of set-screw 10, projecting into the bore 8. The upper end of the adjustable rod 9 is bent horizontally, as at 9^a, and to this horizontal arm is pivotally secured the train of power-transmitting rods.

11 11 are horizontal rods, a series of which connect the driving and driven apparatus. The meeting ends of the rods are provided with heads 12. The rods 11 are connected by means of a sleeve or ferrule consisting of an upper plate 13 and lower plate 14, having central longitudinal grooves or slots to receive the rods, the slots or grooves being enlarged midway of their length to form a chamber to receive the two heads. The upper and lower plates are secured together by means of a bolt 15 and nut 16, the bolt passing through the plates vertically and between the heads of the rods 11. The rods are thus rigidly clamped between the two plates, and are prevented from being withdrawn or shifted in their place by the heads resting in their recessed chamber, with the bolt 15 fitted between them. The bolt-head is provided with an eye 17, through which passes loosely the horizontal arm 9^a of the adjustable rod 9. Eye 17 is prevented from slipping laterally by means of nut 18, screwed upon the extremity of the horizontal part 9^a, which is threaded to receive the nut.

Instead of passing the bolt 15 entirely through two sections of the sleeve or ferrule 13 14 the bolt may be passed through one of the plates and screwed into the other one, as

shown in Fig. 3, and the eye designed to receive arm 9^a may be formed integral with one of the plates.

The operation of my device is as follows: The downwardly-projecting flanges of the base-plate are firmly embedded in the earth. The legs 5 are pivotally mounted upon the plates by springing their feet 6 into the eyes 3 upon the plate. The rod 9 is slipped into its socket and adjusted to the proper height to bring the power-transmitting rods 11 into vertical alinement. The rods 11 are connected by means of the plates 13 14 and the bolt 15, and the eye 17 is slipped over the arm 9^a and secured in place by the nut 18. My device is now ready for use. On power being applied to the series of rods the series is caused to reciprocate longitudinally, moving upon and being pivotally supported by the adjustable standards, which are distributed along the series of power-transmitting rods at suitable distances.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a power-transmitting apparatus, a plurality of base-plates, downwardly-projecting flanges upon said base-plates, rods rigidly connecting said plates together in the same plane, in combination with a reciprocating connecting medium between the driving and driven mechanism, standards or legs forming a support for said connecting medium, pivotal connections between said plates and the lower ends of said supports or legs, and pivotal connections between said connecting medium and the upper ends of said legs or supports, substantially as and for the purpose specified.

2. In a power-transmitting apparatus, a reciprocating connecting medium between the driving and driven mechanisms consisting of a series of rods having heads upon their meeting ends, a coupling device consisting of a screw-bolt and plates adapted to clasp and clamp said meeting ends, as a sleeve, in combination with a support for said series of rods, and means, integral with said coupling mechanism, for pivotally connecting said coupling mechanism directly to said support, substantially as and for the purpose specified.

3. In an apparatus for the transmission of power, a series of connected, reciprocating rods, intermediate the driving and driven mechanism, couplings for the meeting ends of said rods, base-plates having projections on their under sides adapted to hold the plates against movement, legs pivotally supported upon said plates, an upright rod carried by and longitudinally movable upon said legs, means for adjusting the height of said upright rod, and pivotal connections between said upright rods and said rod-couplings, substantially as and for the purpose specified.

SAMUEL M. JONES.

In presence of—
L. E. BROWN,
GILBERT HARMON.